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ABSTRACT

Prepared as part of a review of outcomes assessment programs at the six universities and three community colleges of the Montana University System, this report reviews existing or planned assessment initiatives and provides recommendations. Following an introduction, the historical context of outcomes assessment is described, highlighting developments at the national and local levels and related national legislation. Next, the current status of outcomes assessment in the System is discussed, focusing on the following elements: (1) the role and responsibilities of each unit of the System; (2) existing activities at individual campuses, including proficiency assessment for students pursuing education degrees, student-tracking systems, and early academic intervention; (3) recently developed activities, including the development at one campus of an Assessment Committee; (4) planned activities, such as analyses of graduate placement and satisfaction and an economic impact study; and (5) current and anticipated fiscal needs. A review of specific issues associated with the implementation and consequences of assessment is then presented. Finally, specific recommendations for encouraging assessment activities on campuses are provided, emphasizing the need to develop and implement specific student and teaching assessment activities to achieve institutional improvements and allocating fiscal resources for practices designed to improve learning. Contains 19 references. (TGI)

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MONTANA UNIVERSITY SYSTEM

AND POSTSECONDARY EDUCATION

A REPORT ON OUTCOMES ASSESSMENT IN
THE MONTANA UNIVERSITY SYSTEM AND COMMUNITY COLLEGES

OFFICE OF THE COMMISSIONER OF HIGHER EDUCATION

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A REPORT ON OUTCOMES ASSESSMENT IN THE MONTANA UNIVERSITY SYSTEM AND COMMUNITY COLLEGES

Prepared for the
Joint Committee on
Postsecondary Education Policy and Budget
State of Montana

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In consultation with
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of Higher Education

24 February 1992

A Report on Outcomes Assessment in
the Montana University System and Community Colleges

INTRODUCTION

Earlier this year, staff of the Office of the Legislative Fiscal Analyst provided this Committee with a historic overview of the events which led to the creation of House Bill 0142, which provides for a review of the Montana University System's outcome assessment programs and the fiscal incentives which may be associated with the same. In concert with the report today provided by the Office of the Legislative Fiscal Analyst on the types and anticipated returns of varied fiscal incentives, the purpose of this Report on Outcomes Assessment is to provide the Joint Committee on Postsecondary Education Policy and Budget with an initial review of outcome assessment activities which have been implemented in recent years, or which are planned for implementation over the next two biennia. This Report thus provides a systemwide overview of activities implemented or planned at the six units of the Montana University System and the three community colleges, as opposed to a campus-by-campus examination, the later of which is scheduled for review by this Committee in January, 1993. Also included are the general costs associated with current activities, and the estimated costs associated with the planned activities.

This Report is structured under four major headings: (1) **historic context**, which provides an overview of the outcomes assessment movement nationally and within the State of Montana; (2) a report of the **status** of current and planned assessment activities, and their associated costs; (3) a review of the **specific issues** associated with the implementation and consequence of assessment activities; and, (4) **specific recommendations** for encouraging the perpetuation and anticipated outcomes of assessment programs systemwide.

HISTORIC CONTEXT

Overview of Outcomes Assessment.

Assessment is a measure of performance. Changes in performance are measured over time; in most cases, the frequency of measuring is initiated (i.e., input conditions) before the object (e.g., student) being assessed is exposed to selected variables or conditions (i.e., environment/ treatment) which are believed to cause change (e.g., education), and again after the object has been exposed to the same (i.e., output conditions). Historically, assessment in an educational setting focused upon the academic progress and success of an individual student in mastering the content presented in a given course; the result of the assessment, determined by quantitative and/or qualitative means, was a recorded grade. In recent years, the context of assessment has been expanded to include measures of performance for (1) the teacher as well as the learner, (2) the value of the knowledge and related assignments offered to the student inside as well as outside

the classroom, and (3) the relevancy of the instructional experience--as it pertains to the acquisition of specific skills, knowledge, and values--to the demands for critical thinking, life-long learning, personal growth, and vocational/professional success outside the educational setting.

Definition and examples. Assessment on American campuses has taken a number of turns in recent years, from state-mandated methodologies consisting of the one-time administration of standardized tests to enrolled sophomores or juniors, to the individually-designed and administered qualitative methodologies of portfolio development and capstone seminars or internships for seniors.

Almost all public institutions of higher education in the U.S. collect and report data which indicate the academic preparedness of their entering freshmen students (i.e., admission standards which specify given scores on a standardized test such as the ACT); almost all report the admission/ graduation ratios of their student population over time; and, almost all report data which indicate alumni and employer satisfaction with the academic preparedness acquired by those who successfully utilized the time they invested in the educational experience. None, however, has provided significant evidence that the mere collection of such data, alone, promotes measurable improvement in student, faculty, and institutional performances (AAUP in The Montana Professor, 1991). A few, however, have demonstrated that the process of acquiring and interpreting such data, in concert with having the time and resources to experiment with the means to enhance the teaching-learning relationship, can lead to enhanced opportunities for improved student performance as a consequence of improved institutional quality (Seymour and Chaffee, 1992).

National and local pressures to implement, monitor, and report assessment activities in higher education. Although the practice of assessment has been a part of the learning process early in the development of American higher education, recent calls for educational reform and fiscal accountability--stemming from mounting public dissatisfaction with the preparedness of today's college graduate--have increased pressures upon state legislatures, postsecondary educators, and associated parties to reexamine the teaching-learning relationship in America's postsecondary institutions. By the late 1980's, some legislatures had mandated the implementation of standardized testing, the outcome of which was disfranchisement of the faculty in the assessment process and a lack of follow-through from the point of measuring to the point of fixing the inadequacies of higher education. Consequently, legislatures in recent years have been reluctant to identify the type of measurements to be utilized in the assessment process; however, they have been instrumental in legislatively or fiscally inspiring institutions to become more active in the selection and/or design and implementation of quantitative and qualitative measures of efficient fiscal management, and effective learning. In addition to legislative mandates, the federal government and independent accrediting agencies have played a significant role in pressuring institutions of higher education to assess themselves, and to utilize the findings of those assessments to improve the quality of the academic programs and educational experiences they offer.

In recent years, the Council on Postsecondary Accreditation (COPA) has been instrumental in exploring the issue of educational effectiveness at the postsecondary level. In response, its associated regional accrediting bodies have individually adopted more stringent standards which include the development and implementation of on-going and comprehensive assessment activities as an integral part of the accreditation process; as recently as December of 1991, the Commission on Colleges of the Northwest Association of Schools and Colleges adopted new standards for the assessment of all academic programs, and the post-tenure review of faculty performance. Such standards will apply immediately to those institutions in Montana which are scheduled for interim or full review by the Commission on Colleges this spring and thereafter.

In addition, two professional organizations which provide policy assistance and related input to the governing boards of state systems of higher education have issued reports and provided models for assessing and reporting institutional effectiveness. Last year the Office for State Higher Education Executive Officers (SHEEO) issued a report entitled, "Assessing and Reporting Student Progress: Response to 'New Accountability'", and the American Association of Schools, Colleges, and Universities (AASCU) issued a series of reports on models used by community colleges for assessing institutional effectiveness.

On November 8, 1990, the Student Right-to-Know and Campus Security Act was passed into law (P.L. 101-542), and requires postsecondary institutions to make available by July 1, 1993, and annually thereafter, the completion or graduation rates of certificate or degree-seeking, full-time students. This information must be made available to all students prior to their enrollment in an institution and/or prior to their entering into financial obligation for the purposes of financing their postsecondary education.

Additional legislation, entitled "The Ability to Benefit" prescribes standardized testing for all students entering higher education without a high school diploma and who seek federal financial assistance. Consequently, the federal government has now set specific minimal standards of performance for college admission.

CURRENT STATUS

In July of 1990, Executive Associate Commissioner David L. Toppen provided the Board of Regents with a report on Outcomes Evaluation in Higher Education. Although programs and their associated activities have been implemented on individual campuses in Montana for a number of years, the Office of the Commissioner of Higher Education has historically played an observational role in noting and further encouraging the development, implementation, and review of such activities on a voluntary basis. In light of mounting evidence that mandated activities and uniformly-applied methodologies fail to produce real correlations between the efficient use of resources and a measurable degree of improvements in teaching and learning (AAUP, 1991), it is the intent of the Commissioner's Office to play a more highly visible and supportive role in coordinating the identity and

development of assessment programs which are appropriate and meaningful to the unique missions of individual campuses, and to provide staff assistance in the periodic review of the results of such activities systemwide. As a consequence of this newly-defined role, the Commissioner has instituted an Intercampus Committee on Outcomes Assessment to oversee and coordinate the implementation, review, and report of outcomes assessment activities on each campus of the six units of the Montana University System and the three community colleges.

Independent of the intercampus committee, each of the vocational-technical centers has developed a similar methodology of gathering and reporting assessment data. Currently, the Associate Commissioner for Vocational Technical Education, and the Executive Associate and Assistant Commissioners for Academic Affairs of the Montana University System, are independently collecting and jointly reporting the status of assessment activities in their responsibility areas. As a means to better coordinating these efforts, an invitation to extend the scope of the Intercampus Committee on Outcomes Assessment to include the vocational-technical centers is under consideration.

Pressures for assessment have also been expressed at the state level. Specifically, in 1990, the Educational Commission for the Nineties and Beyond recommended the development of a "long-range program to focus the educational system on outcomes--the knowledge and abilities we wish our students to possess" (Crossroads, p. 6). The Montana Board of Education precluded this recommendation in March of 1989 when it developed the Montana School Accreditation Standards and Procedures, which offered a model of educational goals and measures that local districts could elect to adopt or modify to meet their individual needs.

Commissioner of Higher Education's Charge to Units of the Montana University System and Community Colleges.

It is with this same respect for local autonomy and individual differences that the Office of the Commissioner of Higher Education has restrained from promoting a singular or mandated approach to outcomes assessment in its postsecondary institutions. Rather, the Commissioner has encouraged the institutions to (1) develop comprehensive assessment plans and activities congruent with their individual missions, (2) utilize the data gathered in the assessment process to identify weaknesses and strengths of their institutional performances, (3) identify and implement policies and processes which encourage improved performance of a quality approximate to their peer institutions, and (4) provide documentation that such improvements have been realized under appropriate and self-imposed time lines.

Role of the Intercampus Committee on Outcomes Assessment. For the purpose of improving the effectiveness and efficiency of public higher education in Montana, the Intercampus Committee on Outcomes Assessment (ICOA) shall be comprised of one representative from each of the six units of the Montana University System and the three community colleges, and shall be charged with the responsibility of providing assistance collectively to the four-year and community college campuses in the development of selected and comprehensive assessment programs

appropriate to the unique missions of the various institutions, by (1) acting as a clearinghouse for the acquisition and distribution of literature on new developments in assessment, the discussion of alternatives for implementing specific assessment activities, and the communication of the perceived effectiveness of various assessment programs; (2) encouraging the coordinated development of such programs through the setting of reasonable time lines and the establishment of jointly agreed upon protocols of reporting; and, (3) periodically reviewing the campuses' assessment programs and activities, and offering suggestions for improvement.

The Committee's initial list of commonly-recognized issues include the availability of valid and reliable data for individual and comparative assessments of institutional practices influencing (1) retention, (2) accessibility, (3) the appropriate match between the student and institution, (4) the appropriate match between two-year and four-year institutions, as regards the efficiency and effectiveness of transfer curricula and related policies/procedures, and (5) the appropriate match between graduates from two-year and four-year institutions and the workplace/society.

In the development of a systemwide approach to these issues, the ICOA will solicit and interpret information which pertains to current or anticipated activities in each of the commonly-recognized areas, providing proposed schedules for the timely examination of each, as well as the anticipated fiscal impact of initiating, implementing, continuing, and reporting activities associated with full assessment and improvements in each area. In addition, individual representatives will periodically report to the ICOA the status of any current or proposed special programs and related activities outside the five commonly-recognized areas.

Strategies and time lines for reporting system-wide status of assessment implementation and results. At its September 1991 organizational meeting, the Joint Committee on Postsecondary Education Policy and Budget adopted the following schedule for the hearing of reports germane to the status and progress of outcomes assessment in higher education:

February, 1992:	Commissioner of Higher Education's presentation on Montana Project Status -- initial status report of activities systemwide
May, 1992:	Report and review comments on Montana's assessment activities, presented by the staff of the Legislative Fiscal Analyst
January, 1993:	Commissioner of Higher Education's progress report on activities implemented and planned campus-by-campus

Status Report of Current and Planned Assessment Activities System-wide.

Each institution has initiated a task force for identifying and implementing specific assessment activities, and for establishing time lines for the reporting of outcomes. In addition, each institution has

a person or persons assigned to the responsibility of institutional research; consequently, the ability to gather and interpret data for assessment purposes exists systemwide. However, the ability or willingness of institutional researchers to inform institutional leadership of the significance of such findings and to otherwise influence decisions made by institutional leadership with regard to the link between assessment findings and improvements in educational effectiveness remains unknown, and possibly unappreciated.

Furthermore, a systemwide methodology for soliciting and compiling progress reports on the status of implementing assessment activities and the success in improving educational effectiveness is a new responsibility of the Intercampus Committee on Outcomes Assessment (ICOA).

Therefore, for the purpose of providing the Joint Committee with an initial and general progress report on the outcomes assessment activities of Montana's four-year and community college campuses, this Report will provide (1) examples of long-standing assessment activities on five campuses, (2) examples of recently developed and soon-to-be implemented activities on one campus, and (3) examples of planned activities on the remaining campuses.

Long-standing assessment activities. For one campus, a series of outcomes assessment procedures have been implemented over the years for measuring the academic performance of undergraduates pursuing degrees in elementary or secondary education. Specific assessment of student proficiency in the major includes (1) demonstration of competencies in specific courses (e.g., psychology, English, anthropology) with a grade of C or better, (2) completion of the National Teachers' Examination with a minimum score of 648 in communications skills, and a minimum score of 644 in general knowledge, (3) the well-written, and professionally-oriented essay, and (4) satisfactory completion of a formal interview with three faculty members. Following these assessments, students receive a written evaluation of their performance during the junior year field experience. Following successful achievement towards degree completion and professional acceptance, students apply for admission to student teaching, which provides standards for the completion of courses in the professional sequence with grades of C or better, complemented by a grade point average of 2.5 or better in the major and minor fields, and a cumulative grade point average of 2.2 or better. Following their student teaching experience, students receive a performance report. In addition to meeting institutional requirements for graduation, teacher education majors must also complete the professional knowledge section of the National Teachers' Examination at or above the cutoff score for certification in the State of Montana. Graduates of the program are interviewed the year following the completion of their degree to determine their satisfaction with the quality of their academic program; findings are communicated to the teacher education faculty for the purpose of identifying strengths and weaknesses of the program which may be altered to improve educational effectiveness.

Another campus secured sponsored research funds in previous years to develop a competency-based curriculum in a specific graduate program. Other programs responded to pressures from their individual

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accrediting bodies to implement specific self-assessment activities. In 1984, the campus established a formal, campus-wide student-tracking system for eventually informing decisions with regard to specific and general education reviews. By 1989, the campus established a task force of deans and department chairs, and named a faculty member to an administrative post for the purpose of gathering information on the latest developments in student assessment and to formulate a plan for developing a comprehensive student assessment program on campus. Attention will be given to four primary areas of concern: (1) goal achievement, (2) improving institutional quality and excellence, (3) creative experimentation in the development of instruments and the application of assessment findings, and (4) the coordinated autonomy for faculty in planning and revising the curriculum for the purpose of improving effectiveness. In addition, the task force has recommended several important elements: (1) the appointment of a special assistant to the academic vice president and provost for continuity in the coordination and implementation of an comprehensive assessment program, (2) the establishment of a central repository of technical information made available to faculty involved in designing specific assessment instruments and activities, and (3) focus upon three areas of students' academic and social lives--(a) general education, (b) education in majors and programs, and the (c) quality of student life. Trial projects will include development of an assessment program for an Honors College, with expectation that assessment activities will extend eventually to the departments which supply instruction to the Honors program.

In addition to the evaluation of individual student achievement in general education and major studies, a third campus currently engages in assessment activities for math placement, improved advising procedures, retention, and campus diversity. Other activities include the assessment of student performance by external examiners for the certification of educators (i.e., National Teachers' Exam) and accountants (i.e., Certified Public Accountants' Exam); furthermore, business faculty are involved in gathering baseline data on the academic performances of entering and graduating students.

The fourth campus has engaged in assessment activities which mirror the five commonly-recognized areas of concern to the ICOA. Specifically, the campus has initiated intervention processes for identifying students who are experiencing academic difficulties by mid-term of their first year, and offering tutorial assistance. With regard to the issue of accessibility, courses which are offered less than once every two years are evaluated for possible elimination from the curricula. Special student orientation is designed to help entering and transfer students acclimatize to the campus environment, and faculty are encouraged to evaluate the relevancy of their instructional programs to the needs of graduates in the workplace and society. In addition, the faculty are encouraged to actively participate in the campus' overall strategic planning activities as they address curricular reform and educational effectiveness.

The fifth campus, which has utilized College Board's standardized placement tests for entering students over a period of ten years, has developed a baseline for determining the levels of reading comprehension, writing strengths, and math proficiency of its new students. High risk students receive remedial intervention, and some

thought has been given to the implementation of competency-based exit tests for associate degree graduates.

Recently developed and soon-to-be implemented activities. One campus, in preparation for a review of its assessment activities as a condition of continued accreditation, established an Assessment Committee last year. The Committee identified three primary goals of its planned activities: (1) better retention, (2) better program planning, and (3) better interfaces between feeder schools and the receiving institution. The Committee met with the campus president to identify resources needed to implement a successful assessment program.

Planned activities. Three campuses, following formation of the ICOA, have formed campus task forces for the purpose of overseeing the development and implementation of assessment activities. One intends to establish a student/tracking demographic reporting system by the close of this academic year; a second intends to analyze existing academic programs as regards placement and alumni satisfaction, and to implement an economic impact study to demonstrate the financial effect a postsecondary institution has on its surrounding communities. A third campus intends to divide its assessment activities into two initiatives: (1) student development and outcomes, and (2) institutional effectiveness. A fourth campus intends to initiate an inventory of current campus assessment activities in the Fall of 1992, to review campus options for the development of assessment activities in the Winter of 1993, and to develop intended student outcomes and objectives at the departmental level by the close of Summer of 1993.

Current and Anticipated Fiscal Needs System-wide.

Early assessment activities have been funded by sponsored programs such as FIPSE and Title III. One institution subtracted one-percent of the allocations made to each department and pooled the resources in a fund for intercampus grants, one of which supported a selected assessment activity. Another institution has estimated that costs for the development and implementation of a comprehensive assessment program will cost the equivalent of $100 or more per enrolled student.

Although proponents of fiscal incentives may argue about the worth of rewarding institutions which demonstrate effective learning, the necessity for developmental funding has been expressed by all members of the ICOA. Furthermore, the Education Commission for the Nineties and Beyond recommended that the Board of Regents

> develop a budget for the Montana Assessment Project for presentation to the 1991 Legislature and the Legislature should support this project with a special appropriation that recognizes its innovative nature and importance. These funds should be used principally for instruction, released time and summer compensation for faculty involved with this project . . . we estimate this effort will require a decade from start to completion . . . . (Crossroads, p. 6).

SPECIFIC ISSUES

Historically, the phrase outcomes assessment has been associated with student performance, focusing upon with the difference which occurs in students' cognitive and social development between the time they enter and the time they exit an educational institution. Traditionally, assessment which took place initially in kindergarten through high school settings, and later in higher education was reported in the form of academic preparation (i.e., success in meeting admission standards), grades assigned in individual courses, the composite academic requirements necessary for graduation, and the relevancy of the preparation students received for entering the world-of-work or further education; such application and reporting was based on the assumptions of a scientific model which held that once the student entered the system, s/he continued to receive educational input (i.e.,treatment) until s/he exited (i.e., graduated) as a changed (i.e., educated) product. Today, such assumptions are no longer valid because students in kindergarten through high school do not necessarily graduate from the system which initially accepted and educated them, and students in higher education do not necessarily start their college experiences immediately after high school graduation, nor do they necessarily progress without interruption between the time they enroll in and graduate from one or more institutions; consequently, the development of specific skills, the acquisition and application of a breadth of knowledge, and the maturation to a preferred set of values may occur inside as well as outside instructional and non-instructional settings, both on and off postsecondary campuses. Thus, a multitude of dependent and independent variables must be recognized when determining the effect classroom experiences play exclusively in shaping the outcome of the learning-teaching relationship measured by student outcomes assessment.

Student performance measured by the classroom activities and assignments, however, neither describes fully nor accurately the multi-dimensional and interrelated opportunities for "learning" within the college experience--i.e., is it truly possible to separate the acquisition of knowledge about values, which may be presented in class, from the enculturation and internalization of those same values in the socialization process which takes place in campus life outside the classroom?

In addition, it is also necessary to examine and appreciate the relationship between effective teaching and effective learning. Thus, student performance must be assessed in terms of its relationship to faculty and institutional performance. The implementation of assessment for the acquisition of data alone will not result in improved quality; thus resources which are only aimed at the development and implementation of assessment activities will be unwisely allocated. Additional steps are needed: resources must be made available to interpret the data, to make policy and procedural changes which enhance the performance of students academically, and which ensure the ongoing improvement of faculty and institutional performance.

Time, too, will play a factor: change in academic performance is a function of growth, and growth is measured over time. If institutions are expected to be candid in measuring their effectiveness in positively influencing academic performance and students' capacities for life-long learning, they too must be given the opportunity (without fiscal penalties) to change and measure their growth over time. Thus, abbreviated windows of time for the assessment and the implementation of measures to ensure change must be avoided whenever and wherever possible.

SPECIFIC RECOMMENDATIONS FOR ENCOURAGING ASSESSMENT ACTIVITIES ON CAMPUSES

The data collected as a part of the assessment process should be interpreted in an environment of legitimate concern for changes in the policies and practices which impact efficient and effective learning. The collection of data for the sole purpose of accountability will not result in improved educational effectiveness; it will result only in improved efficiency in the collection of requested data, which may or may not be of value in determining and affecting educational effectiveness.

Thus, in principle, the development and implementation of specific student and teaching assessment activities must be directed to the purpose of achieving institutional improvements while promoting and protecting the involvement of faculty and students in all dimensions of assessment; in turn, the assessment of overall institutional effectiveness must involve not only the faculty and students of the individual campuses, but also the administrative and governing bodies of the campuses and System.

Finally, the fiscal incentives associated with the identification, implementation, and outcomes of such studies should not be used to penalize those institutions which find a need for improvement; rather, such fiscal allocations should be utilized for the adoption of practices which improve learning. Comprehensive efforts to improve the quality of instruction, the relevancy of the learning experiences offered to students, and the preservation of those services and missions unique to the individual campuses of the Montana Systems of Higher Education will be dependent upon and shaped by the timely availability of adequate resources.

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